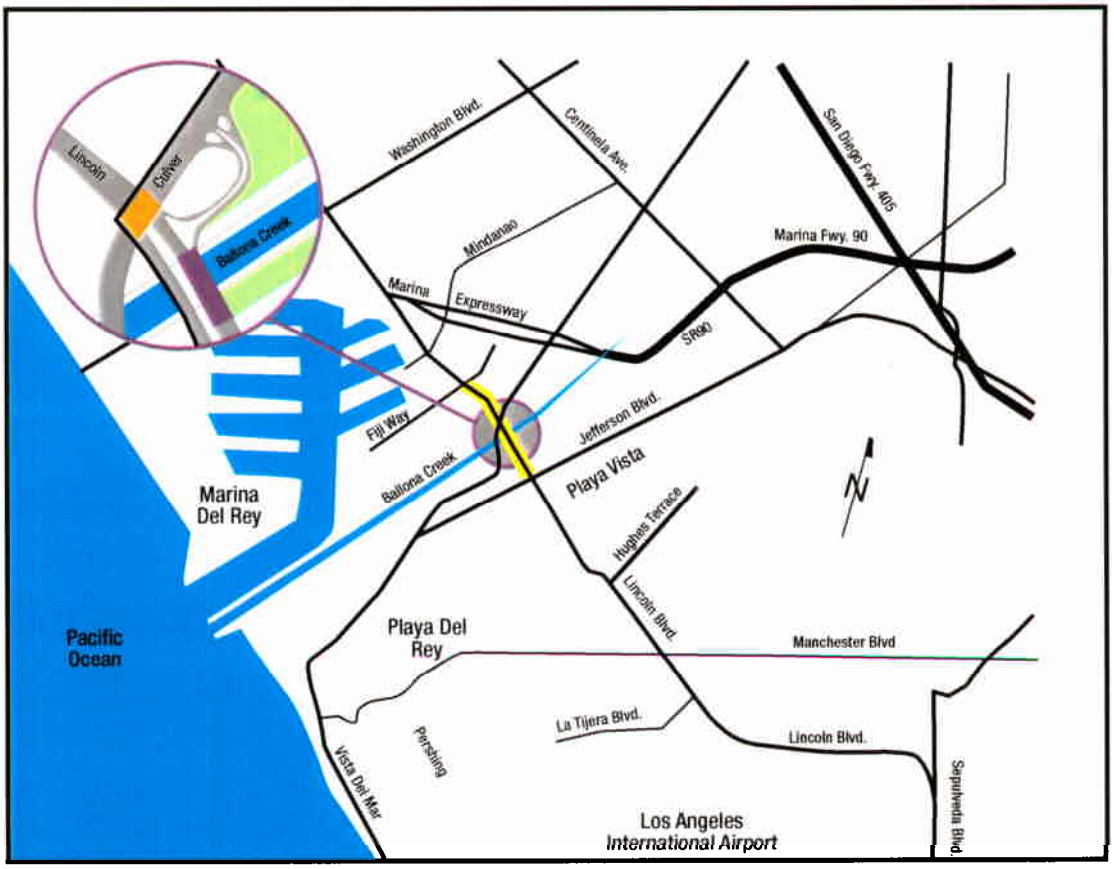
Route 1 (Lincoln Boulevard)

Widening from Jefferson Blvd. to Fiji Way, Construction of a New Bridge over Ballona Creek, and Replacement of the Culver Blvd. Overcrossing

Draft Initial Study/Environmental Assessment (IS/EA)



California Department of Transportation
Los Angeles, District 7
Office of Environmental Planning

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1-PROJECT PURPOSE, NEED, AND JUSTIFICATION

1. PROJECT PURPOSE, NEED, AND JUSTIFICATION

1.1 Introduction

The California Department of Transportation (Caltrans) proposes to improve traffic conditions and reduce accident rates on Route 1 (Lincoln Boulevard) in the City of Los Angeles, in Los Angeles County, through a proposed project whereby Route 1 will be widened from Jefferson Boulevard to Fiji Way, a new bridge over Ballona Creek will be constructed, and the Culver Boulevard Overcrossing will be replaced (Figures 1 and 2).

The above stated portion of Route 1 is a heavily traveled arterial which traverses a moderately urbanized area of West Los Angeles. State Transportation Improvement Program (STIP) funds are anticipated to fund this project. A total of eight (8) project alternatives (including the no project alternative) have been considered, but rejected in lieu of the proposed project.

1.2 Project Purpose and Need

The objectives of the proposed project are to address the need for reducing existing and forecasted congestion levels along the Route 1 corridor. By enhancing the capacity, level of service, and mobility along Route 1, the proposed project will in turn improve safety by reducing congestion-related accident rates, which are anticipated to increase in the future if improvements are not made to the corridor.

These improvements are also contemplated to accommodate ambient regional traffic growth, as well as traffic growth associated with the Playa Vista First and Second Phase Projects, the Los Angeles International Airport (LAX) Master Plan, the Marina del Rey Local Coastal Plan update, and other projects in the area. In light of long lead time for project approvals and design, this process is being initiated now.

Furthermore, due to the irregularly shaped coastline, and physical barriers such as LAX, Marina del Rey, and the environmentally sensitive wetlands, there currently exists a severe shortage of continuous north-south arterial streets in the study area. This further increases the importance of Route 1 as highly traveled West Los Angeles artery, and thus further justifies the proposed project.

1.3 Traffic and Accident Conditions

1.3.1 Current and Forecasted Traffic

Traffic conditions, specifically congestion levels and accident rates, were analyzed within the project limits. Congestion levels were analyzed based on the Level of Service (LOS) rating for

REGIONAL PROJECT LOCATION MAP

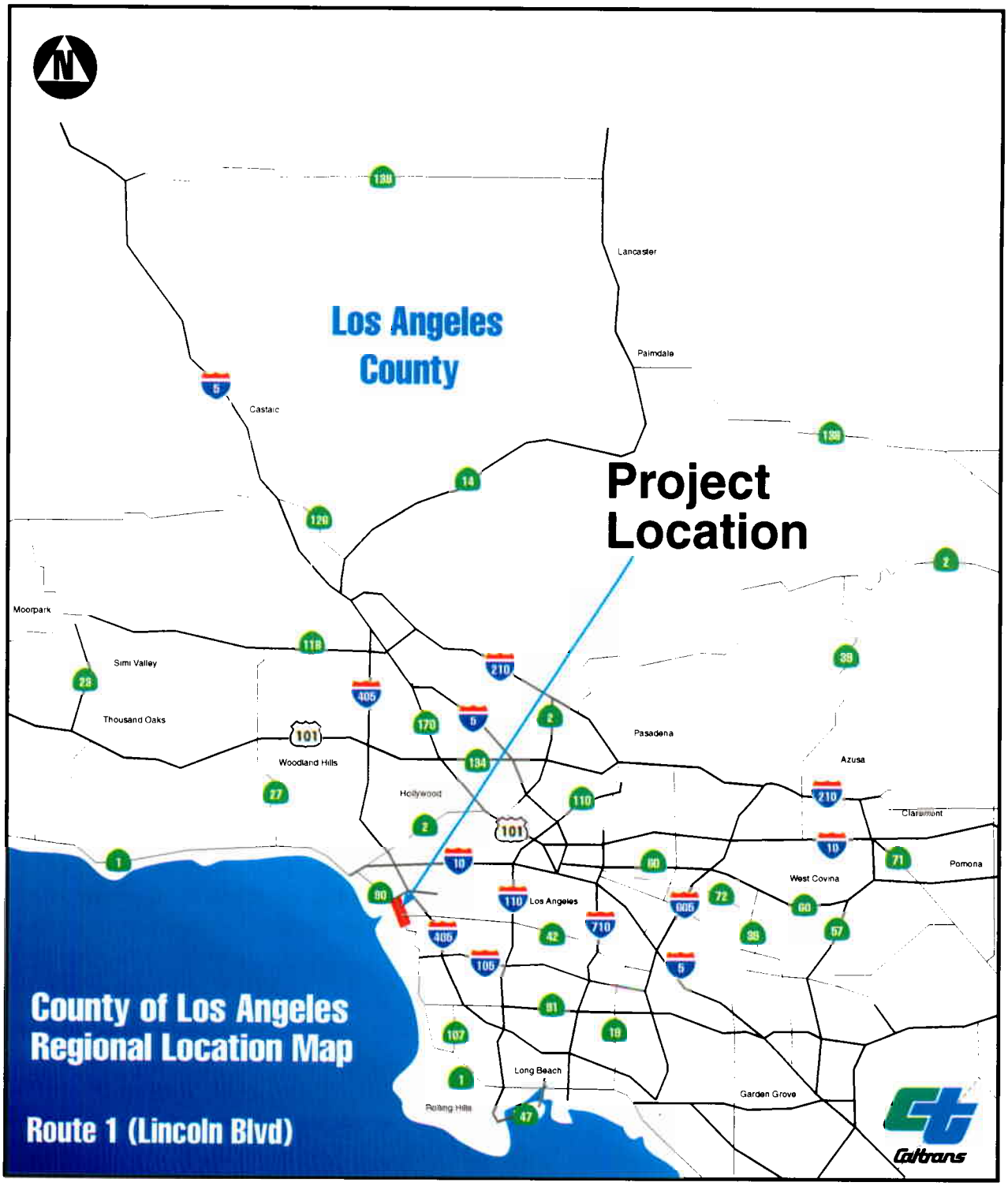

Figure 1

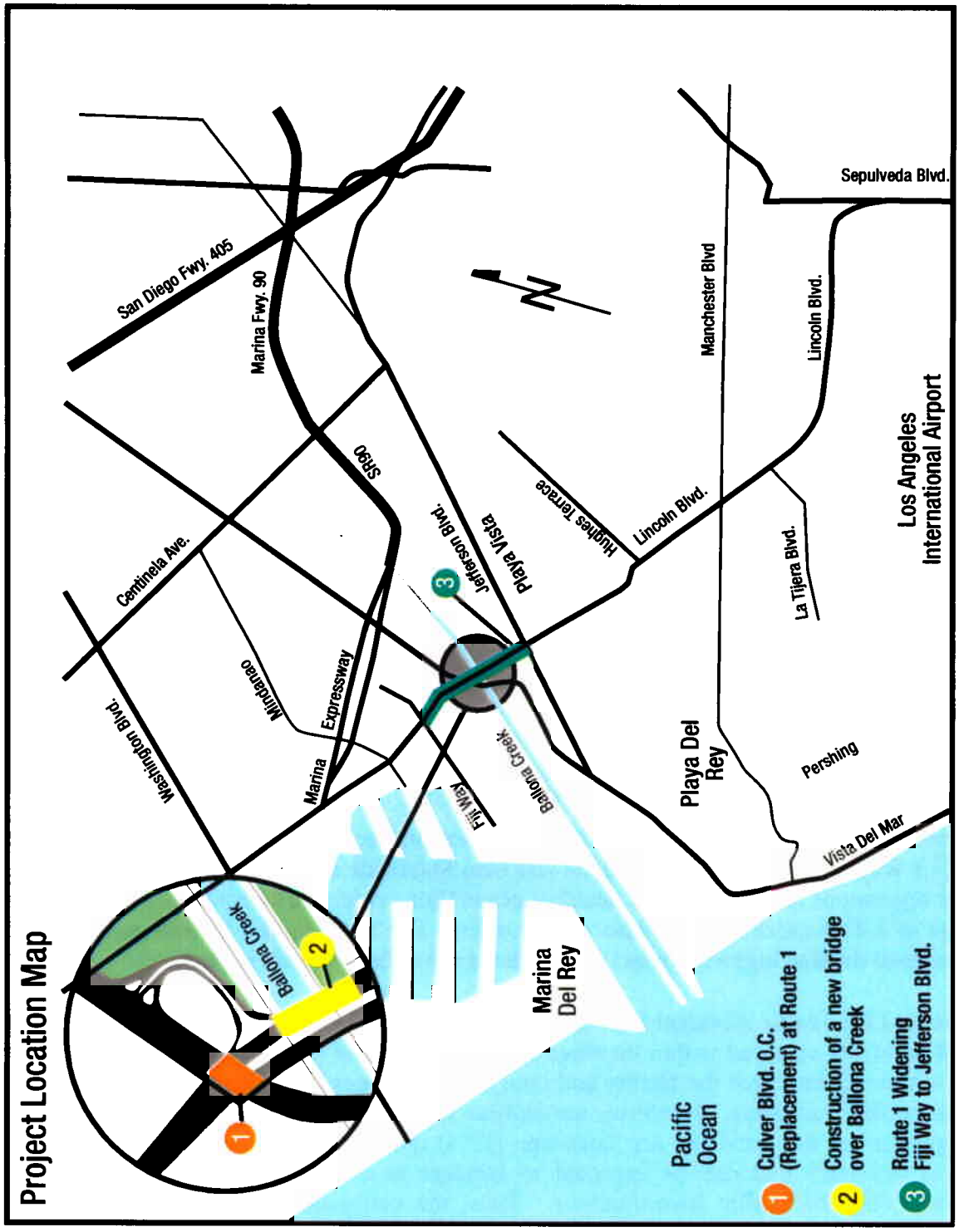
Project Location Map
San Diego Fwy. 405
Marina Fwy. 90
Sepulveda Blvd.
Manchester Blvd
Lincoln Blvd.
Los Angeles International Airport
Centinela Ave.
Jefferson Blvd.
Playa Vista
Hughes Terrace
Lincoln Blvd.
La Tijera Blvd.
Washington Blvd.
Marina Expressway
Ballona Creek
Fiji Way
Playa Del Rey
Pershing
Vista Del Mar
Marina Del Rey
Pacific Ocean
1 Culver Blvd. O.C. (Replacement) at Route 1
2 Construction of a new bridge over Ballona Creek
3 Route 1 Widening Fiji Way to Jefferson Blvd.

Figure 2

each roadway section. Table 1 presents the various LOS definitions. Table 2 presents the forecast years 2001 and 2023 traffic demands along the project segment. As can be seen, the year 2001 volume along the project segment of the Route 1 corridor is 62,917 vehicles per day. By the year 2023, estimates of daily travel will increase to 118,007 vehicles per day.

Table 3 presents the results of intersection capacity calculations performed for two intersections within the project segment. As can be seen, not only are traffic demands expected to climb, but congestion is also expected to increase significantly if improvements are not made to the corridor. The capacity calculations indicate that the forecast year 2023 demands are projected to exceed capacity by anywhere from 130% to 186% during peak hours of the day at the key intersections in the project segment without the project. This represents a significant worsening from the opening year condition. Growth assumptions incorporated into the year 2023 traffic forecasts presented in Tables 1 and 2 include buildout of Playa Vista (Phase I and II). The Marina del Rey Local Coastal Plan update, the LAX Master Plan, and over 200 other development proposals in the general area of the Route 1 corridor that have been identified in the environmental documentation prepared for the Playa Vista development.

The development proposals in the study area will increase the Average Daily Traffic (ADT) from existing condition 53,000 to 118,007 in the year 2023. This increase in traffic will increase congestion dramatically. The two key Lincoln Boulevard intersections in the project segment (Fiji Way and Jefferson Boulevard) currently operate at LOS D-F during the peak periods. And as mentioned previously, the design year 2023 demands are projected to exceed capacity by anywhere from 130% to 186% during peak hours of the day in the corridor. The two key intersections in the project segments for year 2023 operate at LOS F4 conditions during the peak periods without the project. With the project, the capacity at the two intersections will be F0 during peak hours.

1.3.2 Accident Rates

In terms of safety considerations, Table 4 indicates that accident rates in the project segment from Fiji Way to Jefferson Boulevard are less than Statewide averages. The actual accident rate on this segment of Route1 was 0.41 accident per million vehicle miles compared to the statewide average of 2.41 accidents per million vehicle miles. The Los Angeles County accident rate for conventional divided highways was 1.87 accidents per million vehicle miles.

A review of the Traffic Accident Surveillance and Analysis System (TASAS, Table 4) indicated that 14 accidents occurred within the three-year period on this main line conventional highway. Table 4 also indicates that the fatality and injury accident rates lower than the statewide average for comparable roadways. However, an analysis of the collision diagrams indicate that over three-quarters of the accidents are sideswipe (12%) and rear-end collision (56%) – the same types of accidents that can be expected to increase as congestion increases, according the Caltrans Office of Traffic Investigations. Thus, the congestion relief obtained through the proposed project improvements would aid in reducing congestion-related accidents.

TABLE 1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

LOS	V/C	DEFINITION	
A	0.00 - 0.60	EXCELLENT	No vehicle waits longer than one red light and no approach phase is fully used
B	>0.60 - 0.70	VERY GOOD	An occasional approach phase is fully utilized; many drivers begin to feel some what restricted within groups of vehicles.
C	>0.70 - 0.80	GOOD	Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.80 - 0.90	FAIR	Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.90 - 1.00	POOR	Represents the most vehicles intersection approaches can accomondate; may be long lines of waiting vehicles through several signal cycles.
F	>1.00	FAILURE	Backups from nearby locations or on cross-streets may restrict or prevent movement of tremendous delays with continuously increasing queue lengths.

TABLE 2
EXISTING AND FORECAST TRAFFIC VOLUMES ON ROUTE 1

	ADT			AM Peak Hour			PM Peak Hour		
Section	Year 1995	Year 2001	Year 2023	Year 1995	Year 2001	Year 2023	Year 1995	Year 2001	Year 2023
Fiji Way to Jefferson Bl	53,000	62,917	118,007	4,800	5,698	10,687	5,100	6,054	11,355

Note:
[1] Refer to Table 3 for project opening day conditions in year 2001.

TABLE 3
INTERSECTION PEAK HOUR LEVELS OF SERVICE:
EXISTING AND FORECAST CONDITIONS WITH AND WITHOUT PROJECT

Intersection	Peak Hour	Existing Conditions		Year 2001 Conditions				Year 2023 Conditions			
				Without Project		With Project		Without Project		With Project	
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS
Route 1 at Fiji Way	AM	0.85	D	1.26	FO	0.99	E	2.30	F4	1.27	FO
	PM	0.91	E	1.23	FO	0.98	E	2.40	F4	1.28	FO
Route 1 at Jefferson Bl	AM	0.94	E	1.52	FO	1.19	F	2.70	F4	1.31	FO
	PM	1.07	F	1.84	FO	1.17	F	2.86	F4	1.33	FO

Note:

V/C = volume capacity

FO- Long queues of traffic, unstable flow, traffic volume, and traffic speed can drop to 20 miles/hr. Traffic volume will be less than the volume which occurs at level of service "E" (maximum capacity)

F4- Over 1/2 mile queues of traffic, traffic volume, and traffic speed can drop to zero miles/hour. Traffic volume (demand) will be less as three times as capacity.

TABLE 4
TRAFFIC ACCIDENT SURVEILLANCE AND ANALYSIS SYSTEM (TASAS)
TABLE
JULY 1ST, 1996 - JUNE 30, 1999

Route 1 - Fiji Way to Jefferson Boulevard (KP 49.4 to 48.5)

Number of Accidents			Actual Accident Rate [1]			Statewide Average Accident Rate [1]		
Fatality*	Injury*	Total*	Fatality	Injury	Total	Fatality	Injury	Total
0	6	14	0	0.16	0.41	0.02	1.03	2.41

Note: [1] Accident rates expressed in accidents per million vehicle mile
* Only state related accidents (reported)